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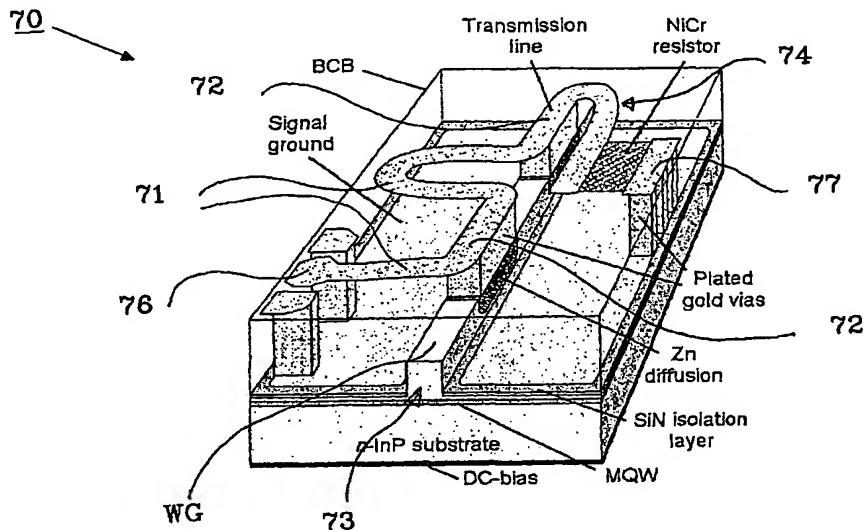
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(54) Title: AN OPTICAL MODULATOR AND A METHOD FOR ADAPTING AN OPTICAL MODULATOR



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(57) Abstract: The present invention relates to an optical modulator, divided into at least two active segments separated by at least one passive segment. The modulator comprises: an optical waveguide with an optical group index n_o having an optical signal propagating at an optical velocity v_o , and a microwave transmission line with an electrical propagation index n_p , having an electrical signal propagating at an electrical velocity V_e . The electrical propagation index n_p of the unloaded microwave transmission line is lower than the optical group index n_o of the optical waveguide. The loading and length of the microwave transmission line are adjusted for a specific Bloch impedance and electrical velocity V_e . The invention also relates to a method for adapting the impedance of an optical modulator.